Tarsellate Date Carselan



Kerr-McGee #12 Santa Fe NW SE 22-20N-27E Apache County 1,5

	ν.	₹ *	` ,	•
COUNTY Apahce		AREA 5 mi E. Nav	rajo LEASE NO	• Santa Fe Fee
WELL NAME Kerr-McGee	#12 Sant	a Fe (Strat Test)		
LOCATION NW SE	SEC 22	TWP 20N RANG	E <u>27E</u> FOOTAGE <u>198</u>	30' FSL & 1980' FEL
ELEV _5737 GR			STATUS	TOTAL
CONTRACTOR Company To	ools		* · · · · · · · · · · · · · · · · · · ·	
CASING SIZE DEPTH	CEMENT	LINER SIZE & D	DEPTH DRILLED BY	ROTARY
7" 255'	9 Sks	NA	DRILLED BY	CABLE TOOL
		<u> </u>		RESERVOIR
		<u> </u>	INITIAL PRO	DDUCTION Dry
		SOURCE		
FORMATION TOPS	DEPTHS	L.L. E.L.	REMARKS	
Dunes	Surface 255	х		
Chinle Porosity	- 1030'			·
Coconino	1248'			
			·	
ELECTRIC LOGS	DF	RFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
		NI ORGITOD INTERNATION		SAMPLE DESCRP.
IE, Borehole Comp.S	onic			SAMPLE NO.
				CORE ANALYSIS
		 		
REMARKS				APP. TO PLUG x
				PLUGGING REP. x
				COMP. REPORT x
WATER WELL ACCEPTED I	BY			
BOND CO. Firemens	Ins. Co.	·	BOND NO. 188	3 98 10-528
BOND AMT. \$ 25,000		CANCELLED		N REPORT
FILING RECEIPT 9500	<u> </u>	LOC. PLAT x	WELL BOOK x	PLAT BOOK x
AFI NO. <u>02-001-200</u>	38	DATE ISSUED 5-2	29-67 DEDICATION	A11
PERMIT NUMBER 41		· ————————————————————————————————————	CONFI	PENTIAL
I BUILL RUIDBR	<u> </u>	(ove	Dat.	12-6-67

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	W	ELL C	OMPL					ETION R			vv ELL	LOG				
	York-	Daep	T		rck ng Esign		Same Reserv		Diffe Rese	rent 🗂	Oil		Gas		Dry	X
Well O	ver L	- 100ch	en _			UPTI		WELL ANI								
Operator								Address	V-0-	D 2 3 44		م احلام	Cit	r Λ	lela.	
	r_McGee					<u> </u>		Kerr-		Build			· OTO	y , O.	KIU.	
Federal, State or	^{Indian} Lease ta Fe	Numbe	r or na	me of les	SSOF II	iee i	ease	12	ner	Wild		•				
Location	ua re							Cou	-	.•						
	O' FSL,) FE	L				Ap	ache							
Sec. TWP-Range																
Date spudded	. 22-201		otal de	th reach	heđ	Dat	e comple	ted, ready t	o E	levation OF, RKB, I	PT or G	ir.)	Elevat		casing	
5-29-67		6-	-2 - 67	7		<u> </u>	duce			<u> 5737 </u>		- teer	dual or t			feet
Total depth		P.B.T.I	D.		1	Sin	gle, dual	or triple co	mpletio	n?	furni pletic	sh sep	arate rei	port for	reach	com-
1282 Producing interv	al (s) for th	ils compl	etion	· · · ·		·		Rotary to	_	d (interval			tools w	sed (in	terval)	_
Was this well d	irectionally	drilled?	Was d	irectiona No	d surv	теу п	nade?	Was copy filed?	of dire	etional sur	У ЕУ	Date	filed			
No Type of electric			(chec)		led wi	th th	e commi	alon)				Date	filed			
Induction	ı – Soni	c					OA GINO	RECORD				<u> </u>				
Casing (report	ull strings	set in w	eil—cor	ductor.	surfac	ce, li			ng, etc.)						
Purpose		ole drille		Size cas				(lb./ft.)		epth set	S	acks c	ement	1	Amt. pi	pellu
Surface	9-5	5/8	-	7"			20	#		255		9			None	
												-		-		
	TUBING R	PCOPD			-	<u> </u>			ł	LINER F	ECORI					<u>.</u>
Sixe	Depth se		Packe	r set at	SI	20		Top		Bottom			es cemen	t 8	Screen ((L.)
in.	1 -	ft.		1	ft.		In		ft		ft.	1				T) T)
		FORATIO	ON RE		th Into					OT, FRAC		CEME		pth In		
Number per f	Size c	type	-	Dep												
	_					_		-				-		-		
	<u>i</u>							PRODUCTION								
Date of first ;	production		Produ	icing me	thod	(Indl	cate if fl	owing, gas	lift or	pumping—i	f pumpi	ng, sh	ow size			
Date of test	Hrs. tested	Ch	oke six	ie C	Oil pro	od. d	uring tea	1	d. duri	ng test MCF	Water 1	prod. d	uring tes bbls		l gravit AF	ly PI (Com
	a. I Cools	g pressu	- I	Cal'ted:	rate of	/ Pro	bbla - Oll	·	Gas		1	Vater		<u>'</u>	as-oil 1	
Tubing pressu	re Casin	R hiesen		duction	per 2	4 hr	B.	bbls.	<u> </u>	м	CF		pple	<u>. </u>		
Disposition of	gas (state v	vhether '	vented,	used for	r fuel	or so	ld):									
CERTIFICATI	E: I, the unde	ersigned,	under 1	the penal	ty of I	perju	ry, state t	hat I am th	e.,	Geolog:	ist					.of the
Kerr-McC	Gee Corp	orati	on			(co	mpany),	and that I a	ım auth	orized by sa	ild comp	any to	make thi	s repor	rt; and t my kno	hat this
report was pr	epared unde	r my sup	61 A121011	and dire	ection .	2114				_					10	
	10, 196	<u> 57 </u>						- 614	nature	(Je	->	<u>e</u> .	24	37	TAT V	×
Date	න ප							318	nature				19)**	\$		$\langle \rangle$
-	C			DE			AL					1				30/16
	R	e ease	Date.	12	- L	- (<u>η</u>		OII	S L & GAS	TATE CONSE		RIZON RON EX	E. €S	SSI	*E
•								1		Completion		\		~	. •	
255.58	METERSON OF							For	m No.	•	File	One C	ору	4	118	
Permit No.	414							'"		-			•	~==	معمتيتين	-

(Complete Reverse Side)

	DETAIL OF FORMATIONS PENETRATED								
Formation	Тор	Bottom	Description*						
Dune Chinle Porosity Coconino	0 255 1030 1248	255 1110	Sd Sd & sh Sd Sd	·					
-									
11									
ا الماري الم الماري الماري									
				e.					

^{*} Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

			-	PLUGGING				4 `				
erator Ke	rr-McGee C	orpo.	uior	ı Ö	Add: Ker	r-McGe	e Bu	lidin	g, Okla	homa	City	, ok
deral, Stale, o lessor's name	r Indian Lease Num if fee lease.	anta F	e	1 72	l No.	Field & Rc	1110	eat				
ocation of Wel)' FSL, 19	80' FE	L	Sec.	22:-	20N-27	ec-Tw	p-Rge or B	lock & Surve	y Cou	_{nty} pache	=
plication to d	rill this well was file		produ	his well ever uced oil or gas NO	Char	acter of well oil (bbls/day)	at com	upletion (ir	itial product (CF/day)	ion) :	Dry?	X
te plugged:	67		!	depth ·		unt well prod)il (bbls/day)			ged: (CF/day)	Wate	er (bbls/c	iay)
ime of each fo ining oil or ga tich formation	ormation con- s. Indicate a open to well-	Fluid conto	<u> </u>	each formation	Depti	h interval of	each fo	ormation	Size, kind & Indicate zo giving amo	nes squee	eze cemei	sed nted,
re at time of p	brakeme								0-15	w/2 s	ks.	
								•	230-3	75 w/	/ 18 s	ks
							,		1005-	1120	w/14	sks
				-					1140-			sks
								·	1220-	1283	8\w	sks
				CASING	RECO	RD						
Size pipe	Put in well (ft.)	Pulled out	(ft.)	Left in well (ft.)	meth	e depth and od of parting sing (shot, oped, etc.)			Packers and	d shoes	•	
7 "	255	0		. 255	<u> </u>				• ,		· · · ·	
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		Ruid cenore	ling to	rominions?	India	ate deenest f	ormati	on contain	ng fresh wat	PT.	:	
	lied with mud-laden	fluid, accord	ling to	regulations?	Indic	ate deepest f	ormati	on contain	ng fresh wat	er.		
	es	ADDRESSE	S OF A	regulations?	<u> </u>			ers of ti	ie surfaci	E	:	
ате	Yes NAMES AND	ADDRESSES Add	S OF A	DJACENT LEASI	E OPE	RATORS OR	OWN	ers of ti		E		
ате	es	ADDRESSES Add	S OF A		E OPE	RATORS OR	OWN	ers of ti	ie surfaci	E		
Y Tame	Yes NAMES AND	ADDRESSES Add	S OF A	DJACENT LEASI	E OPE	RATORS OR	OWN	ers of ti	ie surfaci	E		
errMcC	Yes NAMES AND	ADDRESSES Add	s of A	lahoma Ci	ty,	oklaho	owni ma	Direct	iE SURFACI	E well:	tinent de ner. and ubsequen	tails of attach t plug-
ame [err-McCon addition to lugging operative from suring which mig	NAMES AND Gee Corpora other information relations to base of fre- frace owner authori ght be required.	ADDRESSES Address Addr	s of A	lahoma Ci	ty,	oklaho	owni ma	Direct	iE SURFACI	E well:	tinent de ner. and ubsequen	tails of attach t plug-
ame [err-McCon addition to lugging operaster from suring which mig	NAMES AND Gee Corpora other information religious to base of free fare owner authori	ADDRESSES Address Addr	s of A	lahoma Ci	ty,	oklaho	owni	Direct Direct a fresh was a fresh was a assume for	ie SURFACI lon from this ater well, giv dress of sur all liability f	E well:	tinent de ner. and ubsequen	tails of attach t plug-
iame Gerr-McC n addition to clugging operate etter from sur ling which mig	NAMES AND Gee Corpora other information relations to base of fre- frace owner authori ght be required.	ADDRESSES Address Addr	S OF A dress Ok.	ahoma Citahoma Citaho	ty,	Oklaho ged back for h water sand agree	use as d. naneing to	Direct Di	ie SURFACI lon from this ater well, give dress of sur all liability f	e all perface own	rt: and t	_of the
ame err-McC n addition to hugging operativer from suring which might be reverse side. ERTIFICATE Kerr-	NAMES AND Gee Corpora other information rations to base of freface owner authoright be required. It for additional deta It is undersigned McGee Corp pared under my super	ADDRESSES Address Addr	S OF A dress Ok.	n, if this well was forsted interval to this well as a w	ty,	Oklaho ged back for h water sand agree	use as d. naneing to	Direct Di	ie SURFACI lon from this ater well, give dress of sur all liability f	e all perface own	rt: and t	of the
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ame Lerr-McC n addition to lugging operative from signing which might be considered by the construction of the construction	NAMES AND Gee Corpora other information relitions to base of free frace owner authorish be required. It for additional deta It is the undersigned McGee Corpopared under my superior for the formation of the	Addresses Addresses Addresses ation equired on the sh water sale in comple it, under the oration ervision and	ok of Adress Ok ohis for nd, per tion of the direction of	n. If this well was forated interval to this well as a w	ty,	ged back for h water samell and agreed and therein are signatured therein are	Ge zed by a true, o	Direct Direct a fresh wanc and ado assume for a ssume for a stand compactor and a stand compactor and a standard compacto	ater well, give dress of sur all liability for any to make complete to the com	this repo	ort; and to f my kno	of the

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Company of the compan

APPLICATION TO ABANDON AND PLUG

· · · · · · · · · · · · · · · · · · ·	;		1 1			
Wildcat						
PERATOR Kerr-McGee Corp	oration	ADDRESS	Oklahoma	City, C	Oklahoma	<u>:</u>
'ederal, State, or Indian Lease Number	Santa Fe			WELL NO	12	
r Lessor's Name if Fee Lease	20			NTY_AT	oache	
URVEY 20N-27E	_SECTION22		COUI	N.I.A		
OCATION 1980' FS & EL				<u> </u>		
						
TYPE OF WELL Strat Tes			TOT/	AL DEPTH	1282	
ALLOWABLE (If Assigned)	(Oil, Gas or Dry	Hole) 	<u></u>	•		
		(Rhie)	WATER	₹	(Bi	ols.)
		•	•	OF TEST_		
	5					
PRODUCING HORIZON		PRODUCING	FROM	·	го	
. COMPLETE CASING RECORD						
?" at	255					
					· · · · · · · · · · · · · · · · · · ·	
			· · · · · · · · · · · · · · · · · · ·	•		• • •
		leave casi	ng in hole	<u> </u>		
2. FULL DETAILS OF PROPOSED P		1005-1120,		5 12	220-1283	
			・エヤショエエノ	J9		
plug 0-15,	230-373,	1007-1120,				
plug 0-15,	230-375,	100)-1120;				
plug 0-15,	230-375,	1007-1120;				
plug 0-15,	230-373,	1007-1120,				
plug 0-15,	230-373,	1007-1120,				
plug 0-15,	230-373,	1007-1120,				
plug 0-15,	230-373,	1007-1120,				
If well is to be abandoned, does propo				Yes	If not, ou	tline
If well is to be abandoned, does propo proposed procedure above.	sed work conform				If not, ou	tline
If well is to be abandoned, does propo proposed procedure above.	sed work conform 6-2-67	with requirements	s of Rule 202?	Yes		tline
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS	sed work conform	with requirements	s of Rule 202?	Yes	If not, ou	ttline
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK	sed work conform 6-2-67 Kerr-McGee	with requirements	s of Rule 202?	Yes		tline
	sed work conform 6-2-67 Kerr-McGee	with requirements	s of Rule 202?	Yes		tline
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK	sed work conform 6-2-67 Kerr-McGee	John C. Me	s of Rule 202?ADDRESSOl	Yes	ty, Okla.	<u></u>
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK	sed work conform 6-2-67 Kerr-McGee ENT TO	John C. Me	s of Rule 202?ADDRESSOl	Yes		
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK	sed work conform 6-2-67 Kerr-McGee	John C. Me Geologist 710 Kerr-	s of Rule 202?OleyerOleyer	Yes	ty, Okla.	<u></u>
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK	sed work conform 6-2-67 Kerr-McGee ENT TO	John C. Me	s of Rule 202?OleyerOleyer	Yes	ty, Okla.	<u></u>
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK	sed work conform 6-2-67 Kerr-McGee ENT TO Name Title Address	John C. Me Geologist 710 Kerr-	s of Rule 202?OleyerOleyer	Yes	ty, Okla.	
If well is to be abandoned, does propo proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK	sed work conform 6-2-67 Kerr-McGee ENT TO Name Title Address	John C. Me Geologist 710 Kerr-	s of Rule 202?OleyerOleyer	Yes kla. Ci ., Okla	ty, Okla.	,92
If well is to be abandoned, does propor proposed procedure above. DATE COMMENCING OPERATIONS. NAME OF PERSON DOING WORK. CORRESPONDENCE SHOULD BE SE	sed work conform 6-2-67 Kerr-McGee ENT TO	John C. Me Geologist 710 Kerr-	s of Rule 202?OleyerOleyer	Yes Ala. Ci Okla OF ARIZO RVATION	ty, Okla. City, Okl	,
If well is to be abandoned, does propor proposed procedure above. DATE COMMENCING OPERATIONS. NAME OF PERSON DOING WORK. CORRESPONDENCE SHOULD BE SE	sed work conform 6-2-67 Kerr-McGee ENT TO	John C. Me Geologist 710 Kerr-	ADDRESS OF McGee Bldg	Yes Ala. Ci Okla OF ARIZO RVATION	ty, Okla. City, Okl	
If well is to be abandoned, does propor proposed procedure above. DATE COMMENCING OPERATIONS. NAME OF PERSON DOING WORK. CORRESPONDENCE SHOULD BE SE	sed work conform 6-2-67 Kerr-McGee ENT TO	John C. Me Geologist 710 Kerr-	ADDRESS OF McGee Bldg	Yes Ala. Ci Okla OF ARIZO RVATION	ty, Okla. City, Okl	
If well is to be abandoned, does propor proposed procedure above. DATE COMMENCING OPERATIONS NAME OF PERSON DOING WORK CORRESPONDENCE SHOULD BE SE STATE OF ARIZO OIL & GAS CONSERVATION By:	sed work conform 6-2-67 Kerr-McGee ENT TO Name Title Address Date	John C. Mc Geologist 710 Kerr- June 28,	ADDRESS OF McGee Bldg	Yes Ala. Ci Okla OF ARIZO RVATION	ty, Okla. City, Okl	<u></u>
If well is to be abandoned, does propor proposed procedure above. DATE COMMENCING OPERATIONS. NAME OF PERSON DOING WORK CORRESPONDENCE SHOULD BE SE STATE OF ARIZO OIL & GAS CONSERVATION By:	sed work conform 6-2-67 Kerr-McGee ENT TO Name Title Address Date	John C. Me Geologist 710 Kerr- June 28,	ADDRESS OF Rule 202? Yes Ala. Ci Okla OF ARIZO RVATION	ty, Okla. City, Okl	<u></u>	

C

6-2-67

11.1.57

Telcon w/Norman Schoenhols, Kerr-McGee

Re: Kerr-McGee #5 Santa Fe (Strat Test)

Requests to plug

Surface casing to 580'.
Plugs "
Surface to 15'

555' to 605' (to encompass bottom of casing

All sands encountered were below 888'. Therefore plug 875' to 1205' T.D.

Re: Kerr-McGee 12 Santa Fe (strat test)

Surface casing set to 2551.

Plugs:

Surface to 15'
230' - 375' (to encompass bottom of casing.
Water sands 285' - 310'
330' - 350'
Water sands 1030' - 1108'
1005' - 1108'
Water sands 1152'-1165'
1140-1175
Sands 1248 to 1283' T.D.
1220 to 1283.

Rig from #12 will move to #11.

Rig on #5 will take a couple of days off; then undecided as to which hole.

APPLICALIO	N FOR PE	RMIT	TO DRILL	OR A	ENTE	R
APPLICATION TO DRILL	8.			RE-E	NTER OL	'D MEIT []
NAME OF COMPANY OR OPERATOR	<u>e087</u>		· <u> </u>	``` ;	<u> </u>	
TIO KERR- MCGEE BL	DG ', OK	City	C1-7 Y			ンベレ <u>み</u> State
Drilling Contractor						
Address		<u> </u>	081-64	<u> </u>		
		ON OF W	ELL AND LEAS	SE		
Federal, State or Indian Lease Number, or if fee l			Well number			Elevation (ground)
	-		T TASTE	est # (.2	5750
SANTA FE Nearest distance from proposed location to property or lease line:			Distance from procompleted or ap	roposed loc plied—for v	ation to r well on th	nearest drilling. ne same lease:
1980	fee	et				feet
Number of acres in lease:			Number of wells completed in or	on lease, drilling to	including this reser	this well, evoir:
640		Ì				
If lease, purchased with one or more wells drilled, from whom purchased:	e			Addr	ess	
	10.0		ship—range or b	look and su	rvev	Dedication (Comply with Rule 105
Well location (give footage from section lines)	! _					640
1980 FSL', 1980 FEL Field and reservoir (if wildcat, so state)	1 2 2		County	<u> </u>		1. e+0.
		[APACL			PERSON OF THE CO.
MINERBL STRAT Distance, in miles, and direction from nearest to	wn or post office			_	·	
5 M. E NAVASO,	Rotary or cable	toole				ate work will start
Proposed depth:	-			-		1-67 miles and a second
1350	Organization R				iling Fee	of \$25.00
Bond Status ON FILE Amount	On file		r attached	1	_	TO BE WALLED
Remarks:	てきらて					
MINERAL STRA	•		_		ane.	
TO DRILL 5%"	140CE 1	£ (80e)	と さいかん	ACE	CRSI	at 55 30
CERTIFICATE: I, the undersigned, under the	nenalty of perio	urv state	that I am the	GE S	د ص	of th
						
report was prepared under my supervision and d	(compared that	any), and the facts	that I am authoristated therein a	orized by sa re true, cor	aid compa rect and c	any to make this report; and that the complete to the best of my knowledg
			Sign	ature	see Qu	conser
				<u>.</u>	19-6	. 7
			Date			ET1711
Harmit Number: 414						200
Permit Number: Approval Date: 5-29-67			O			F ARIZONA STATES
Approved By: John Bunn	uster		J			Drill or Relatier CO N

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Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided. Form No. 3 File Two Coples

(Complete Reverse Side)

SAME TO AND A

- Paragraphia

- 1. Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
- 2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
- 3. All distances shown on the plat must be from the outer boundaries of the Section.
- 4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO_____
- 5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES______NO______ If answer is "yes," Type of Consolidation______
- 6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner			Land Description	
				CERTIFICATION
		,		I hereby certify that the information above is true and complete to the best of my knowledge and belief.
				Position GEOLOGIST Company
				Date 5-19-67
				I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.
SORVEY	er's Piat	70 BE 1	mailed	Date Surveyed Registered Professional Engineer and/or Land Surveyor
0 330 660 990 13	20 1650 1980 2310	2640 2000	1500 1000 500	Certificate No.

PROPOSED CASING PROGRAM

Weight

Som

Size of Casing

71

Grade & Type | Top | Bottom | Cementing Depths | Sacks Cement | SSS | SSO | SS

MINERAL STRAT No. 12 PREPARED FOR KERR MIGEE CORP. SEC. 22, TRON, RETE, 6.65. R.M. State of ARIZONA Mineral Strat #12 Ground Stee 5737 23 22 6 & 5. P.M. 27 26 PREPARED BY: J. G. MARTINEZ & ASSOC. ENGINEERS—SURVEYORS

N. M. P. E. & L. S. LIC. NO. 1765

GALLUP

Scale / "= 400

Day 5-22-1967

414

NEW MEXICO

Drawing

No QSW - 40

Ω



PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION, STATE OF ARIZONA,

0:	ORPORATION	
	ll to be known as	
Kerr-McGee #	12 Santa Fe (strat	test)
(Wi	ELL NAME)	
located 1980' FSL and FEL (NW/4SE	/4)	
Section 22 Township 2011 Range	27E Apache	County, Arizona.
The all		of said
Section, Township and Range is dedicated to t	his well.	
Said well is to be drilled substantially as of in full compliance with all applicable laws, sta	outlined in the attached Ap tutes, rules and regulation	plication and must be drilled s of the State of Arizona.
Issued this 29th day of	May	, 19 <u></u> .
PRIOR TO BEING ALLOWED TO PRODUCE THIS WELL YOU MUST BE IN FULL COMPLIANCE WITH RULE 105, SECTION A FAMUS (SECTION, WITH RESPECT TO THE PRODUCE TO BE PRODUCE).	OIL AND GAS CONS	SERVATION COMMISSION Samually UTIVE SECRETARY

State of Arizona

Oil & Gas Conservation Commission

Permit to Drill

FORM NO. 27

API 02-001-20038

PERMIT

RECEIPT NO.

414



OFFICE OF

Gil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

October 29, 1973

Mr. Ted Strickland Rocky Mountain Well Log Service Co. 1753 Champa Street Denver, Colorado 80202

Dear Mr. Strickland:

As per your request of October 25, 1973, we are sending you the following logs that you have requested with two exceptions: The Geothermal Kinetics #1 Power Ranches well is still in confidential status and we do not have logs on the Kerr-McGee Corp. #10 Santa Fe.

Kerr-McGee Corp. #5 Santa Fe, 23-20N-28E, Apache Co., Permit #407 Sonic Log and Induction Electrical Log

Kerr-McGee Corp. #11 Santa Fe, 24-19N-27E, Apache Co., Permit #413 Borehole Compensated Sonic Log and Induction-Electrical Log

/Kerr-McGee Corp. #12 Santa Fe, 22-20N-27E, Apache Co., Permit #414 Borehole Compensated Sonic Log and Induction-Electrical Log

Brown & Thorpe #1 Bullard-Wash, 3-10N-10W, Yavapai Co., Permit #589 Borehole Compensated Sonic Log and Induction-Electrical Log

Arkla Expl. Co., #10 N.M.A., 27-16N-23E, Navajo Co., Permit #359 Radioactivity Log

Due to a recent ruling of the State Finance Department, it is required that this Commission charge postage on the mailing of various matter, i.e., logs, well records and so forth. The postage for mailing the above logs comes to \$.83. Please make check payable to the Oil and Gas Conservation Commission.

Very truly yours,

W. E. Allen, Director Enforcement Section

WEA/rlb

Encs.

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Rocky Mountain Well Log Service Co.

1753 Champa Street

266-0588 Area Code 303

DENVER, COLORADO

80202

BOB ANDREWS, Division Manager

(ELSÍ)

October 25, 1973

CASPER WYOMING

BOB FITZGERALD PETA, BUDG, ARCADE BUDNE 234-6011

MIDLAND, TEXAS

DAVID CLARK 105 WEST WALL PHONE SEC-0591 Mr. W. E. Allen Oil & Gas Conservation Commission State of Arizona 4515 N. 7th Ave. Phoenix, Arizona 85013

Dear Mr. Allen,

May we borrow from you the logs on the following walls:

6. Brown & Thorpe	#1 Bullard-Wash	3-10N-10W	Apache, Wyo. Apache, Wyo. Apache, Wyo. Apache, Wyo. Maricopa, Ariz. Yavapai, Ariz.
6. Brown & Thorpe	#1 Bullard-Wash #10 N.M.A.	3-10N-10W	Yavapai, Ariz. Navajo, Ariz.

They will be returned promptly upon completion of our reproduction process.

Thank you for your cooperation

Very truly yours,

Rocky Mountain Well Log Service Co.

By: Ted Strickland

RECE: LA

414

رميا العاربية

Operator KERR MC GEE OIL INDUSTRIES INC.

Bond Company Insurance Co. of N. America Amount 25,000

Bond No. M 41 95 25 (KM528) Date Approved 10-28-65

Permits covered by this bond:

related covered		,			
~	10 '	336	417		
•	36	389	418		
	37 .	340	419		
	38 .	391	470		
	39 .	392	422		
الماليات المالات	57 .	396	426		
DATE 10-24-68	63.	397	427. 441		
•	64 ·	398	791 <u>1</u> 95	4	
	142.	399	(4/6)-	33C (this
	238	402		1,7	بی
superseded by	-303	AD3			
Superceded by American Casualty Co. Bond	90 .	404			
\$ 25,000	91 ·	405			
#5471020-52	3 4 9.	406			
	303	407			
	377	408			
•	378·	409			
; ;	379	410			
	380	411			
	381 ·	413			

KERR-MCGEE

KERR-MCGEE BUILDING . OKLAHOMA CITY, UKLAHOMA 73102

July 11, 1967

Mr. John Bannister Arizona Oil & Gas Commission 1624 West Adams Phoenix, Arizona 85007

Dear Sir:

RE: Kerr-McGee #1 Santa Fe strat test, Permit 402
Kerr-McGee #2 Santa Fe strat test, Permit 403
Kerr-McGee #3 Santa Fe strat test, Permit 404
Kerr-McGee #4 Santa Fe strat test, Permit 406
Kerr-McGee #5 Santa Fe strat test, Permit 407
Kerr-McGee #6 Santa Fe strat test, Permit 408
Kerr-McGee #10 Santa Fe strat test, Permit 405
Kerr-McGee #11 Santa Fe strat test, Permit 413
Kerr-McGee #12 Santa Fe strat test, Permit 414

We are returning the Plugging Record and Application to Plug forms on the above wells. We are also submitting for filing the Well Completion form for each well. We request the information to be kept confidential if there is a provision in your Rules and Regulations for so doing.

Electrical logs on wells where we were able to run them will be filed within 90 days from completion. It is requested that these logs be kept confidential for the six months period following completion.

Respectfully,

John C. Meyer

JCM/mk Enclosures

STATE COMM.

CONFIDENTIAL

Release Pate

fly



May 26, 1967

Mr. John Bannister Arizona Oil and Gas Conservation Commission 1624 Adams Street Room 202 Phoenix, Arizona

Dear Mr. Bannister:

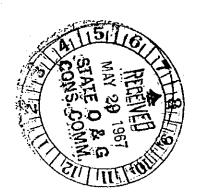
Enclosed are two checks in the amount of \$25.00 each. They are to cover the fee required for our application for permit to drill Strat Tests 11 and 12. The Application for Permit to Drill (Form No. 3) for each was sent in from Chambers, Arizona. The Surveyor's plat should be in your office by now.

We hope to move to Strat Test 11 and 12 the first of next week. We will temporarily postpone the drilling of Strat Tests #7 and #8.

Sincerely,

John C. Meyer

JCM/mk Enclosures: 2 checks for \$25.00 each



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ee: Kr. John Kr. Norve	Hojer 11 Schoenals		
As requested	by Kr. John Heyer, we are f to accompany Kerr McGee Co		
Phoeni	lens St. Room 202 k, Arisona	SUBJEC I	ef survey on Ho. 11 and 12
Art sone	nn Bannister a Oil & Gas Conservation Co	GAU TELE	W. AZTEC AVE JUP, NEW MEXICO PHONE 863-4042
PLY NO LATER THAN_	SE NOTE ENCLOSURES	Lugine	rlinez & Associates ERS - SURVEYORS 2. O. BOX 178

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rang Emparation

1.565.2048.20

5-19-67 astermass mode sm anyona O EG Componiation Comme. Placemen, any Doon John -Inalo O - gethormologico all some al Diese drow at some such Navap - Champleon - Sandons and and 11 that hards gradend scaperag all 12. Form 3 in desposito is enclosed. The check for soul will be sent from OKC. The surveyor were be in the attalog learne elses à some la Calant to you No brokow comind brown sear baco te base dune sand a top Chenle, The cours and cours on it colod ? Jo Duo 5 tral even broom Desc solvest a ser get a search as o'll on a tallo top. We Crapero Donge let sego (Quan 43/4 to 5%) to que un a fait more noon to run the Schamberga 3% rande. It's been too stely and we almost lost one Q them. Casalger estable march 2xer CO ST ST Respondence DED sund in Com 25 Grown OKC 8803 CANARY, 8903 WHITE, 9003 GREEN, 9103 IVORY STATE LEASE.

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COUNTY <u>Apache</u>	.	AREA <u>10</u>	mi NW Re	d Rock LEASE NO	• Nav 14-20-603-8429
WELL NAME Pan Amer	ican Petro	leum #1 Na	avajo V		
LOCATION ESE NE SE	SEC <u>16</u>	TWP _38	<u>N</u> RANGE	29E FOOTAGE 194	40' FSL 900' FEL
				CHATTIC	TOTAL 7-9-67 DEPTH 4445
CONTRACTOR Loffland	Brothers				
CASING SIZE DEPTH	CEMENT	LINER	SIZE & DI	EPTH DRILLED BY	ROTARY ×
<u>16"</u> 39¹	40 Sks	<u> </u>	IA	DRILLED BY	CABLE TOOL
10 3/4 603	550 Sks	<u> </u>		PRODUCTIVE	RESERVOIR
		_	<u> </u>	INITIAL PRO	DUCTION Dry
		SOU	RCE		
FORMATION TOPS	DEPTHS		E.L.	REMARKS	
DeChelly	842'	<u>X</u>	X		
<u>Hermosa</u>	2467'		 		
Igneous Sill	3358'				
					
	<u> </u>		 		
	<u> </u>	 			
		<u> </u>			
ELECTRIC LOGS	PE	RFORATED I	INTERVALS	PROD. INTERVALS	SAMPLE LOG Am strat
IE, Borehole Comp					SAMPLE DESCRP. Farm Cut SAMPLE NO. 1422 *
GR; Sidewall Neut Porosity Log, Com					CORE ANALYSIS
Formation Density					DSTs *2514 /Tucson
REMARKS					APP. TO PLUG x
					PLUGGING REP. x
					COMP. REPORT ×
WATER WELL ACCEPTED	ВҮ				
BOND COSeaboard	Surety Co	·		BOND NO.	None
BOND AMT. \$ 25,00	·	CANCELLED		DATE	N REPORT 6-16-67
FILING RECEIPT 95	07	LOC. PLAT	· x	WELL BOOK X	PLAT BOOK X
API NO.		DATE ISSU	ED 5-2	9-67 DEDICATION	E/2 SE/4
PERMIT NUMBER 4/			-	GONFIDEN Release Date /-/	TIAL
			(ove	r) Kelease Date	

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DRILL STEM TEST RESULTS TO NO. FROM 877 Rec. 10 DM 839 1 Rec. 15 DM 2843 2704 3636 SEE-FILE FOR DETAILS CORE RECORD REMARKS RECOVERY FROM TO NO. REMEDIAL HISTORY NEW PERFORATIONS WORK PERFORMED DATE STARTED - COMPLETED ADDITIONAL INFORMATION

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erator						Address						
an American	Petrol	eum Co	rporati	Lon		501 Aix	port	Drive	, Far	ningt	on, Ne	w Mexico 8
leral, State or Ind	ian Lease N	umber or	name of les	sor if fee	lease	Well Num	ber	Field &		_{ir} dcat		
4-20-0603-8	3429					1			MIT			
extlen	long t	וסט				Cour	us Apach	e				
940' FSL ar												
ection 16,	T-38-N	R-29	-E	NE/4	SE/4							
ate spudded	D	ate total	depth reach	hed D	ate complet		o [E]	evation F, RKB,	RT or (3r.)	hd. flant	of casing
5-7-67	<u> </u>	7-5	-67	1		(PXA)		6595	(RDB)	feet	ual or tri	nie completion.
otal depth	P	P.B.T.D.		Si	ngle, dual	or tripie co	whterror	• •	furn	ish sepa	rate repor	t for each com-
1445 1 roducing interval	(a) for this	completio	<u>+</u>			Rotary to	ols use	d (interva			tools used	(interval)
_	for for this	pretto	•				4445					
None Vas this well direc	ctionally dri	lled? Wa	directions	i survey	made?	Was copy	of dire	ctional su	rvey	Date	filed	
No		1	No							Date	Alas	
ype of electrical										Date	nı∞ı 7-7-6	7
IES, GR Son	ic, SNP	Calip	er, Den	181ty,	Dipmet	er RECORD				<u> </u>	, -, -0	<u> </u>
Casing (report all	atringa sat	in wall-	conductor.	surface.			ng, etc.))				
Purpose	Size hole		Size cas			(lb./ft.)		epth set	8	acks ce	ment	Amt. pulled
	20'			<u> </u>		.75#		391		40	·	None
onductor .	15'		!	0-3/4"		.5#		6031		550		None
Surface		-3/4"		J - 91 - T							i	
T	UBING REC		 					LINER	RECORI			
Size in.	Depth set	ft. Pac	ker set at	Size ft.	in.		ft.		ſt.	.	cement	Screen (ft.)
	PERFO	RATION 1	RECORD							CEME		EZE RECORD
Number per ft.	Size & t	эре	Depi	th Interv	al	Am't.	& kind	of materi	al used	_	Dept	interval
None						_				-		
				-	TATEMENT AT Y	RODUCTIO	าม			_1		
	J.,_41			sthod (in				pumping-	lf pump	ing, sho	w size &	type of pump:)
Date of first prod	ancnon	1	oducing inc	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2.0.2.0							
Date of test H	rs. tested	Choke	ezia (Oil prod.	during test	1	d. duri	ng test	Water	prod. du	ring test bbls.	Oll gravity * API (Con
<u> </u>	1 Carlow		Calted	rate of Pr		<u> </u>	Gas		V	Vater		Gas—oil ratio
Tubing pressure	Causing	pressure		per 24 i		bbls.		3	(CF		bbls.	
Disposition of gas	s (state who	ether vent	ed, used for	r fuel or	pold):				,			
					<u> </u>						 	
				·		T a 4h	•	Ares 1	Engin	eer		of the
Pan Americ	an Peti	oleum	Corpore	ECLON (company), a	and that I s	ım zutho ıerein z	orized by s e true, cor	ald comp rect and	any to i	nake this : e to the be	eport: and that thi st of my knowledge
report was prepa	uea under h	12 subclass	WILL SHOULD		14		L.	,,1.	1	3 A	_	-
July 1	10, 1967	7	<u> </u>				XA	U.Ca.	lon	21	·	
Date		1.00%	- K	(1011		Sig	nature			\mathcal{O}		
			(3)	So.	(\$)							
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			14	SO FE					STATE	OF AR	IZONA	
				00	N Z	_	OII					MISSION
394 P. C.			1. 1									
State Production			12	\$ %	罗巴	N)	Well	Completio	n or Rec	ompleti	on Report	and Well Log
esse per la la				COMM.			Well	. •		ompleti e One C		and Well Log

(Complete Reverse Side)

T. Hermosa	2467'		•			
T. Sill	3358'	40				
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DETAIL OF FORMATIONS PENETRATED

Bottom

Top

842 1

Description*

INSTRUCTIONS:

 $\mathbb{N}_{\mathbb{R}^{n-1}} \subseteq$

(E

Formation

T. DeChelly

Attach drillers log or other acceptable log of well. This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than

thirty days after project completion.

Form No. 4

^{*} Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushlon used, time tool open, flowing and shut-in pressures, and recoveries.

		(PLUGGING	RECORD				
Operator			-		Address		17	- New Mayina	8740
PAN AMERIC	CAN PETROLE	M CORPO	RATI	ON Well			ve, Farmingto	n, New Mexico	0/40
Federal, State, or I or lessor's name if	Indian Lease Numb	er 14-20 jo Tribo	J-U6U 11 "V	3-8429	Wildes	ıt			
Location of Well							ge or Block & Survey		İ
	L & 900' FE			Sect	ion 16, T-38	sN, R-	296 lion (initial production	Apache	1
Application to dril in name of	i this well was file	d	produ	iced oil or gas	Oil (bbls/day)		Gas (MCF/day)	Dry?	
Pan America	an Petr. Co	rp.	<u>:</u>	No l	None Amount well prod	l waing who	None	Yes	-
Date plugged:				depth	Oil (bbls/day)	ueing wiie	Gas (MCF/day)	Water (bbls/day)	
7-8-67	(PXA)		4	445'	None		None	None ed	-
Name of each formation of bore at time of ple	Indicate open to well-	Fluid cont	ent of c	ach formation	Depth interval of	each form	ation Size, kind & Indicate zor giving amoi	ies squeeze cenichtea,	_
None		-				Cement	40 sacks (33	300-3400')	_}
						Cement	40 sacks (24	00-2500')	
					1		80 sacks (
				_			30 sacks (St		7
					 		10.000		1
		!					L		-
	F = 100 to 200	1 70-22-2		CASING Left in well (ft.)	RECORD Give depth and		Packers and	shoes	-
Size pipe	Put in well (ft.)	Pulled ou		Left in wen (11.)	Give depth and method of parting casing (shot, ripped, etc.)			6117118/	Z
16"	39'	0	<u>-</u> _	39'	<u> </u>			100 = 0 X	k
10-3/4"	6031	0		6031			(10)	221 8	4
10-3/4_		<u> </u>						SE SE	且
	<u> </u>	<u> </u>		 			14	80 3 3	\mathbb{F}
	<u> </u>	<u> </u>						3 3	I
Was well fili	ed with mud-lader	fluid, acco	ding to	regulations?	Indicate deepest f	ormation None	containing fresh was	Permi	4
	Yes	ADDRESS	S OF	ADJACENT LEAS	E OPERATORS OR		OF THE SURFACE		
Name	NAMES AND		ddress	ADDITION AND ADDIT			Direction from this		
No adjace	nt lease op								-
Navajo Tr	ibe of Indi	ans W	indo	Rock, Aria	ona, Surfac	e Owne	<u>ts</u>		<u>-</u>
						-	<u> </u>		\dashv
In addition to o plugging operat letter from sur- ging which migl Non		required on esh water s izing compl	this for and, pe letion o	rm, if this well warforated interval of this well as a w	es plugged back for to fresh water san vater well and agre	use as a id, name eing to as	fresh water well, giv and address of sur ssume full liability fo	e all pertinent details of face owner, and attac for any subsequent plu	of th g-
Use reverse side	e for additional de	ail.							_
			_						
CERTIFICATE	: I, the undersigne	d. under th	e penal	ty of perjury, stat	e that I am the	Area	Engineer	of t	he
Pan Ameri	can Petrole	um Corr	orat	ion company) an	d that I am authori	ized by saj	id company to make	this report; and that th	ıis
report was prep	oared under my sup	ervision an	d direct	ion and that the fac	cts stated therein ar	e true. 💅	rect and complete to t	the best of my knowleds	ge.
_	1 17 704	,				SIII	reaton)	∜′.	ļ
Ju Date	ily 17, 1967				Signature	200		/	-
					1		PARE OF ARIZO	NI A	一
					OIL		STATE OF ARIZO CONSERVATION		- [
1					*		Flugging Record		-
:					4		File One Copy		
	63 E				Form No. 30				-
Permit No	415				Form No. 10				

W.F

A LICATION TO ABANDON AND PL

FIELD Wildcat					
OPERATOR Pan American F	etroleum Corporation	ADDRESS 501 Air	port Dr., Farm	<u>ington, N</u>	<u>ew Mex</u> ico 8740
Federal, State, or Indian Lease N or Lessor's Name if Fee Lease	umber Navajo Tribal "V" -	14-20-0603-8429	WELL NO	1	
SURVEY	SECTION Sec. 1	6, T38N, R29E	COUNTY	Apache	
OCATION 1940' FSI	and 900' FEL				
TYPE OF WELL Dry Ho	le	ie)	TOTAL DEPTH	4445 '	
ALLOWABLE (If Assigned)	(Oil, Gas or Dry Ho	ie)			
LAST PRODUCTION TEST	OIL 0	(Bbls.)	WATER	0	(Bbls.)
	GAS0	(MCF)	DATE OF TEST	7-8 - 67	
PRODUCING HORIZON	None	PRODUCING FROM		то	
1. COMPLETE CASING RECO	on Set 16" casing (4	42.75#/ft.) at 39	in a 20" hole	e with 40	sacks
of cement. Set 10-3/	/U - //O E#/EF)	at 602! in a 15"	hole with 550	sacks of	cement.
4.	···				
	<u> </u>				
		0.1	as follows:	191118	
2. FULL DETAILS OF PROP				Time	(9)
	1-34001 - 40 sacks		\sim	20 E	是為
2400)-2500' - 40 sacks			S. A. S.	學出
			T	- 00	EC
Surface	- 501 - 30 sacks			300	
Erect m	arker and clean up ar	rea			1
				1.511	<u></u>
If well is to be abandoned, do	es proposed work conform w	vith requirements of Rul	e 202? Yes	If 1	not, outline
proposed procedure above. DATE COMMENCING OPERA	Amounte .hilv 8.	1967			
NAME OF PERSON DOING	WORK Bryon-Jackson	Inc. ADDRE	ess 1115 Fairvi	ew Ave. Po	armingtor
CORRESPONDENCE SHOUL				No	ew Mexico
CORRESPONDENCE SHOUL	Maine				
	Ares	a Superintendent			
	501	Airport Drive, F	armington, New	Mexico	87401
	Address	17 1067			
	Date Date	y 17, 1967	· · · · · · · · · · · · · · · · · · ·		
			STATE OF ARIZ		
Date Approved 7-22		[]	Application to Abandon		ON
	F ARIZONA VATION COMMISSION		Application to Abandon File Two Cople		
By Jehn Ba	nnester	Form No. 9			
				···	
Permit No. 415		s,			
V					

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DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY WELL COMPLETION OR RECOMPLETION REPORT AND LOG* LYPE OF WELL ONLY OF RECOMPLETION REPORT AND LOG* LYPE OF WELL ONLY OF RECOMPLETION OF RECOMPLETION REPORT AND LOG* LYPE OF COMPLETION NAME OF OFFICE OF THE COMPLETION OF THE COMPLETION REPORT AND LOG* NAME OF OFFICE OF THE COMPLETION		•
DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY WELL COMPLETION OR RECOMPLETION REPORT AND LOG* TYPE OF WELL: OUT.	0.51Δ PS	Form approved. Budget Bureau No. 42-R355.5
WELL COMPLETION OR RECOMPLETION REPORT AND LOG* TYPE OF WELL: WILL: WILL: BAY # OLDER TYPE OF COMPLETION: WILL: WILL: WILL: WILL: BAY # OLDER TYPE OF COMPLETION: WILL: WILL: WILL: WILL: BAY # OLDER TYPE OF COMPLETION: WILL: WILL: WILL: WILL: BAY # OLDER WILL: BAY # OLDER TAKE OF CREATER FAM MARICAN PETROLEUM CORPORATION LOCATION OF WILL: (Kyper logiston circuity sund in secondance with only State requirements)* At total depth At total State At total depth At total depth At total depth At total State At total depth At total		
WELL COMPLETION OR RECOMPLETION REPORT AND LOG* TYPE OF WELL. WILL DAY Other THE BANK OTHER	CAL SURVEY	
TYPE OF COMPLISTION: WELL WELL DAY OTHER COMPLISTON: WELL OVER DEFE DATE DATE DISTRICT OTHER CONTINUES AND CONTROL OF THE STANDARD OF THE ST	& te typi	I, ALLOTTEE OR TRIBE NAM
TYPE OF COMPLETION: NEW (2) WORK DEFT D		
NAME (2) WORK DEATH ADDRESS DEATH OF THE DEA	DRY Other 7. UNIT AC	EEMBAL NAME
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DATE SPECIAL PETROLEUR CORPORATION SOI Airport Drive, Farmington, See Maxico 87401 100-1000 of well (Report Incesion closely and in accordance with any State requirements). At top prod. interval reported below At total depth Same 11. Fermit No. 12. Control of 15. Ref. 12. Control of 15. Ref. 13. Fermit No. 14. Fermit No. 15. Electricos (Br. Reg. at 15. Ref. A. A. O. A. TV. P.		o Tribal "V"
THE STUDEN DETWO, PERMITTING ON THE CREATE CONTROL OF THE AND FOLL WS. At total depth At tot	APTON 9. WELL	
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6. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records	[함 경험성] T. A. S. A. Arthur C. A. C. C. S. A. S. C. C. C. A. 다. 📗 전 주고	
if. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records		
ORIGINAL SIGNED ST. TITLE AND ENGINEER DATE July	chel information is complete and correct as determined from all avail	ble records

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INSTRUCTIONS

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General: This form is designed for submitting a complete and correct well completion report and log on all types of lands, and the stand of State and the number of copies to be or both, pursuant to applicable Federal and/or State have and of State in regard to local, and regarding special measure completions or will be issued by, or may be obtained from, the local forman and metal and or state office. See instructions on thems 22 and 24, and 38, below regarding special forms completions are completed or the circumstrated and supmired seems and currections on thems 22 and 34, and 38, below regarding special forms and and core analysis, all types electric, etc.); formation in flee supmired to the supmired seems and currections on thems 22 and state office. See instructions on thems 22 and currections on themselves are them 35.

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GEOLOGIC MARKERS 37, SUMMARY OF POROUS ZONIBS:
SHOW ALL MAIOUTANY ZONES OF POROSTRY AND CONTENTS THREOF; CORED INTERVALS; AND ALL DRILL-STEM TERTS, INCLUDING SHOW ALL RATORIAN ZONES OF POROF, THE TOOL OFFINE FLOWING AND SHUT-IN PERSEURIS, AND RECOVERIES DEPORT INTERVAL TESTED; CUSHION USED, THE TOOL OFFINE AND SHUTH.

1 Stem Test No. 2 (2704-2863'). Mad 9.3-58. 1/4" surface choke, 3/4" bottom hole mak blow ismediately - died in 2 misutes. Shut in 1 hour, tool open 3 hours. Heak interes. Shut in 1 hour. Recevered 15' drilling mud and few bubbles of gas. Hydrostatic Initial bottom hold pressure shut is 115 pel, final bottom hole pressure shut is 115 pel, final bottom hole pressure shut in 143 see. 86-86. Bottom hole pressure shut is 150 F. Drill Stem Test No. 3 6441-3636'). Tool onen Final bottom hole presents 26 psi. Bottom 10 drilling mud. No show of oil or gas 1/4" surface choks, 3/4" bottom hole aut in 1 hour, tool open 3 bours. Weak Hydrostatic pressure in 1732 and out 17 with 8-3/4" but im for 45 minutes 267 psi. Bottom bole pressure final 24-24. Final bottom hole temperature 950 g. Drill Stem Test No. 4 (4368-4445'). Tool open 5 minutes timing through out test. Shot in for 1 hour and tool open for 2-1/2 hours. No. Hadrostatic pressure in 2104 and out 1990 psi. Initial bottom hole pressure ship pressure final 57-57. Recovered 5' drilling and and so abov of gas or oil.
Following manner: 40 sacks cement from 3300 to 3400', 40 sacks from 2400-2500', blow for 15 minutes, decreesing to ver TRUD VERT. DEPTE Rotary drilled to 4445 Tool open 90 in KAN Totary tools. Soudded 15" hole 6-12-67 and drilled to 603' and set 10-3/4" cast rotary tools. Soudded 15" hole 6-12-67 and drilled to 603' and set in 30 minutes hole. Exill Stem Test No. 1 (839-877'). Tool open 5 minutes. No bubbles At surface. Initial bottom hole presents shut in 26 psi.

Notices hole temperature 80° F. Nydrostatic pressure in 4:8 and out 392. Nacovered Notices hole temperature 80° F. Nydrostatic pressure in 4:8 and out 392. Nad 9.3-58.

Notices hole temperature 80° F. Nydrostatic pressure in 4:8 and out 392. Nad 9.3-58.

Notices hole temperature 80° F. Nydrostatic pressure in 1 hour. Receivered 15' drilling blow immediately. Died in 1-1/2 minutes. Shut in 1 hour. Receivered 15' drilling because in 1365 and out 1369 psi. Initial bottom bold pressure shut is 115 psi. S minites and tool open for 2 bours. Good or 45 minites. Recovered 5' drilling mud. -67. Sat 16" cestng to 39" per. Bottom hole presente floeing is sminetes - week blow. Shot in for a week blow at and of rest. Shot in f per. Initial bottom hole pressure an pressure at pressure shut im 267 per and bottom bear week blow in 30 seconds and cont blow at surface. Shut in for 1 bour 86 bet and final 86 per. Bottom bole Spudded 20 hole with cable tools 6-7 g and abandoned on 7-9-67 in the sacks from 750-950', 30 sacks from from 750-950', 86 pet and final 86 pet-Plug and sbendon 80 sacks from 7

THE PERSON NAMED IN

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Form approved. Budget Bureau No. 42-R1424. LANGED STATES SUBMIT IN TRIC. AT (Other instructions on verse side) Form 9-331 (May 1963) 5. LEASE DESIGNATION AND SERIAL NO. 14-20-0603-8429 GEOLOGICAL SURVEY 6. IF INDIAN, ALLOTTEE OR TRIBE NAME SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals.) Have jo 7. UNIT AGBREMENT, NAME OIL GAS OTHER Wildcat 8. FARM OR LEASE NAME 2. NAME OF OPERATOR Meyer to Tribel "V" PAN AMERICAN PETROLEUM CORPORATION 9. WELL NO. 3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, Rev Hexico 87401.

LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*

See also space 17 below.)

At surface. 1 10. FIELD AND POOL, OR WHIDCAT 11. SEC. T. B. M., OR REX. AND SURVEY OR AREA SEC. A. SE/4 Section 16. 1940, ART & 300, ART T-38-N, E-29-E 12. COURTY OR PARISH 13. STATE 15. BLEVATIONS (Show whether DP, RT. GR, etc.) 14. PERMIT NO. Arizona Apache 6595' (RDB) Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data 16. SUBSEQUENT REPORT OF: REPAIRING WELL WATER SHUT-OFF TEST WATER SHUT-OFF PELL OR ALTER CASING ALTERING CASING FRACTURE TREATMENT MULTIPLE COMPLETE ABANDONMENT. SHOOTING OR ACIDIZING ABANDON* SHOOT OR ACIDIZE CHANGE PLANS (Nors: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) REPAIR WELL 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) In reference to our notice of intention to abandon the above well; it was abandoned on July 8, 1967 in the following manner. Ser coment plugs as follows; 3300-3400 2400-25001 750-950 Surface - 50' 30 sacks Arected abandonment marker. RECEIVED STATE OF SOON O JUL 1 2 1967 U. S. GEOLOGICAE SURVEY 18. I hereby certify that the foregoing is the same and any inches G. W. Eaton, Jr. Ares Engineer TITLE (This space for Federal or State office use) t H coeff
The results
and the results
and the results
are results APPROVED BY LEPROVAL, IF ANY: AUG 7 1968 *See Instructions on Reverse Side P. T. McGRATH

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DISTRICT ENGINEER

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	PARTMENT OF THE INTE	ATTOTY VELSE MADE	14-20-0603-8429
	GEOLOGICAL SURVEY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY	NOTICES AND REPORTS	ON WELLS	
	for proposals to drill or to deepen or plus "APPLICATION FOR PERMIT—" for aud	ch proposals.)	7. UNIT AGREEMENT NAME
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WELL WELL WELL WANTED	OTHER BALGOSE		8. FARM OR LEASE NAME
	PROLETICAL CORPORATION		9. WELL NO.
ADDRESS OF OPERATOR	ee, Farmington, New Mexi	co 87401	
LOCATION OF WELL (Report	location clearly and in accordance with	any State requirements.*	10. FIELD AND POOL, OR WILDCAT
See also space 17 below.) At surface			11: BEC., T., B., M., OR BLK. AND
1940' FSL	and 900' 1/8L		SPEVET OR AREA
			1-38-H. R-29-E
4. PERMIT NO.	16. BLEVATIONS (Show wheth	er DF, RT, GR, etc.)	12. COUNTY OR PARISH 18. STATE
	4595' (296)		Apoche Arison
.s. (Check Appropriate Box To Indica		
NOTIC	E OF INTENTION TO:	SUBS	EQUENT REPORT OF
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL ALTERING CAMING
PRACTURE TREAT	MULTIPLE COMPLETE	PRACTURE TREATMENT SHOOTING OR ACIDIZING	ABANDONMENT
SHOOT OB ACIDIZE REPAIR WELL	CHANGE PLANS	(Other)	The state of the s
(Other)		(Note: Report res	ults of multiple completion on Well impletion Report and Log form.)
Inequality as the seasons:	theve well was a dry bol	tinent details, and give pertinent da locations and measured and true ve	tes, including estimated date of starting rical depths for all markers and zones pe
Inaquet as the	theve well was a dry bol 400' = 40 secks 50' - 40 secks 50' - 80 secks	tinent details, and give pertinent da locations and measured and true ve	tes, including estimated date of starting rical depths for all markers and zones pe
Inequate as the samer: 3300-3 2400-2 750-9 Surfec	theve well was a dry bol 400' = 40 seeks 50' = 40 seeks 50' = 80 seeks e = 50'= 30 seeks	tinent details, and give pertinent da locations and measured and true ver	tes, including estimated date of starting richal depths for all markers and zones per control of the control of
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Inneresch au the amender: 3300-3 2400-2 750-9 Surfac	there well was a dry bol 400' = 40 seeks 50' - 40 seeks 6 - 50' - 30 seeks ly approved by Nr. McGri	tinent details, and give pertinent da locations and measured and true ver	tes, including estimated date of starting richal depths for all markers and zones per control of the control of
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Telcon w/George Eaton, PanAm 7-7-67 4:15 p.m.

Re: Pan American #1 Navajo V Permit 415

Ran logs yesterday and today -- everything Schlumberger had. Still trying to interpret logs; and depending upon final interpretation by the experts, may want to plug over this weekend.

Phil McGrath, U.S.G.S., and Hank Pohlmann, Navajo Tribe, were on site today. Eaton, NcGrath and Pohlmann all agreed they could see nothing encouraging on the logs. However, the logging experts will have the final decision and if they see nothing then will plug in accordance with the program outlined below as agreed between McGrath and Eaton:

T.D. 4445'. Top of sill at 3358'. Plug from 3300-3400' Top of Hermosa at 2465' Plug from 2400-2500' Top of De Chelly (as Eaton calls it, but McGrath calls it Cutler) at 8421 Plug from 750-950' Pipe, 103/4", set at 603'. Will not set a plug across casing since above plug is so close. Plug 50' to surface.

Will erect marker and clean up location.

Will put logs in mail tonight and ship samples to Commission office.

Will file copies of U.S.G.S. sundries reports covering application to plug, plugging record, well completetion report, as well as a completion report on our form.

Will in a few days give us a letter to release all info from confidential.

Did of course give verbal permission to plug in accordance with above.

	6582 GR 6595 KB	WELL SIT	E CHECK	By R J - 5-67
Contractor	LOFFLAND	BROS	Person(s) Contac	eted Low Bortz É
			Wagne 1	ALeske
		Rotary Cable Tool	Present Operation	ons
Samples		·		Air
Pipe			Drilling with	Mud
Water Zone	3		Size Hole	
Lost Circ.	Zones		Size Drill Pipe	
Formation	Tops		Type Bit	Drilling
Cores, Log	s, DST		No. Bit	Pote
			Formation	
Crews			Lithology	
remarks, p	HOTO, MAP helly 842 Smpt	∕ Si≥e	Has Cone hole 83/4	LAB on Location
Cut/ Herm	er 1200 " 05A 2506 "	DST #1		: 15' Sli GC Mud
DST #1 De Ch	dly 339-877		IF 86	
Open 6" N	o blow		FF 86 ISIP 1146 /60"	
Byon 1/2	hes		FSIP 143.6 60"	
SI 30" Rec 10' M			Max Temp 48°	
151P 26.24 FSIP 26.24				
15 26.2 #				
FF 26.2 #				
IH 418 # FH 392.21	*		(See Revense	side)

WELL NAME

0/

Permit No. 4/5
Confidential: yes No

251 # 3

2441-3636 Open 5"; 51 45"; Open 2 how; FSi 45":

Tool open 2nd time: Good blow 15 min; Very weak

blow after 1 hr 45 min.

131P 267 | 45 min

FSIP 267 | 45 min

DST #4. 4368-4445 Open 2 hrs. Rec 5 \$ mud No show

Exam 5" IF

151P 86 # |60" Very weak blow of ten 30 pec

101P 86 # |60" throughout 5 min flow period.

11 57 # No blow on 2nd flow period.

11 57#

Top quanty dispite - 3358
Top dispose - 4418
TD 4445

 \sim

July 5, 1967

Telcon w/George Eaton

Re: Pan American #1 Navajo V Permit 415

Present depth 4446. Still in sill.

Preparing to DST again today. Things do not look encouraging at present. If no encouragement from this DST will not deepen and TD will be4446, and will log tomorrow, July 6, 1967. If there is encouragement from DST will deepen.

Not same type of igneous sill as encountered in Dineh bi Keyah Field. This sill is a dioryte sill: no indication of porosity except possibly from some tiny fractures.

Fleuresence reported previsouly was: fractures have filled with an extraneous material, like calcite. It was this material that flouresced.

415

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			Form approved.
Form 9-331 (May 1963)	U、TED STATES MENT OF THE INTERIO	SUBMIT IN TRA CATE (Other instructions on r	" Rudget Bureau No. 42-K1424.
	SEOLOGICAL SURVEY	Olf reise muc)	14-20-0603-8429
		NE MELC	6. IF INDIAN, ALLOTTER OR TRIBE NAME
SUNDRY NOI	ICES AND REPORTS C	JN WELLS ack to a different reservoir.	
Use "APPLICA"	sals to drill or to deepen or plug be ATION FOR PERMIT—" for such pr	oposais.)	7. UNIT AGREEMENT NAME
OIL CAS			I. Dall Adabased Asses
WELL WELL OTHER	Wildcat		8. FARM OK LEASE NAME
=.	n Cornoration		Have jo Tribal "V"
Pan American Petroleus 3. ADDRESS OF OPERATOR	Corporation	, , , , , , , , , , , , , , , , , , , ,	9. WELL NO.
501 Airport Drive. Far	mington, New Mexico		10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (Report location of See also space 17 below.)	clearly and in accordance with any	State requirements.	
At surface		1 Marian Land	11. SEC., T., B., M., OR BLK, AND
south war and t	nnni ww	I MENINERAL PROPERTY OF THE PR	SURVEY OF ARRA
1940' FSL and !	JUU PAL	Bearings of Control of Section 1	T-38-N, R-29-E
14. PERMIT NO.	15. ELEVATIONS (Show whether DF	, RT, GR, etc.)	12. COUNTY OR PARISH 18. STATE
	6582' CL		Apache Arizona
16. Check A	ppropriate Box To Indicate N	lature of Notice, Report, o	r Other Data
NOTICE OF INTE	ENTION TO:	SUBS	EQUENT REPORT OF:
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	Report X
EEPAIR WELL	CHANGE PLANS	(Other) Monthly (Nors: Report res	rite of multiple completion on Well
(Other)	penamona (Clearly state all pertine)	Completion or Reco	impletion Report and Log form.)
proposed work. If well is direct nent to this work.) *	tionally drilled give subsurface loca	tions and measured and true ve	rtical depths for all markers and zones perti-
Status 6-29-67 drilling	36311. Spud surface	hole 6-7-67 and set	t conductor pipe at 39'.
Drilled to 603' and set	10-3/4" casing at 603	31. Cement circula	ted.
These are the results of	two drill stem test	s conducted on the	제품수수 : 1 전 : : : : : : : : : : : : : : : : : :
Brill Stem Test No. 1 -	220-277 (DeChelly)		가 있는 것이 되었다. 그 사이를 통해 되었다. 그 사이를 보고 있는 것 같아요.
Brill Stem 1881 NO. 1	033-011 (Descript)		有一次避免的一致 医氢氯酸
Tool open 5 minutes	s, shut in 30 minutes	, tool open 1-1/2 h	ours, shut in 30 minutes.
W. L.LLlas at anytic	ana Tritial Present	2 - 26 051 10 30 51	亚拉尼亚亚丁 : 1 下班世上 九 1 年 4 5 6 7 8 8 8
26 psi in 30 minute	ss. Bottom hole pres	sure flowing 20-20.	Hydrostatic head in 418;
Hydrostatic head of	SE 392. RECOVERED TO	or attitud man a	nd no show of oil or gas.
Bottom hole temper	PEGER * OA. N.		
Drill Stem Test No. 2 -	2704-2843' (Hermost)	•	그 그리 성존한 그 홍그리 서류월
Mid 9.3-58. 1/4"	surface choke; 3/4"	ottom hole choke.	Tool open 5 minutes ~
very weak blow imm	ediately, died in 2 m	simutes. Shut in to	or i nour. Kooi open
3 hours. Week blo	w immediately, died i ling mud - few bubble	lm 1-1/2 minutes. :	etic head in 1365:
Mecovered 15 Gril	ut 1309. Initial pro	essure 115 pai: fire	il pressure 143 poi.
Bottom hole pressu	re flowing 86-86. Ic	ttom hole temperati	re = 95° F
18. I hereby certify that the faregoin		<u> </u>	
C W Ea		Area Engineer	ратв "Ата 30. 1967
G. V. Lat	on, Jr.		
(This space for Federal or State	office use)		그 사는 기계 계속 경육회의
APPROVED BY	TITLE		DATE
CONDITIONS OF APPROVAL, I	F ANY:		

*See Instructions on Reverse Side

CONFIDENCE

415

June 30, 1967

Telcon w/George Eaton

Re: Pan American #1 Navajo F Permit 415

Present depth 3636' in Pennsylvanian. Preparing to DST today. REsults will be forwarded immediately.

Initial target was Barker Creek member of Pennsylvanian, expected at about 3450'. Entire formation apparently replace by igneous sill from 3450' to 3600'. Approximately three intervals (from 2 to 3 feet thick) fleuresced.) die to colore filling fractures report of 7-5-67

Coconino came in at approximately 800'. Top of Hermosa consists of shales and limestons, primarily limeston, at 2505'.

Will continue deepening after DST.

interval 3441' to 3636 Good blow for 15 min, decreasing weak blow recovered 5' dlg. mud. 1'SIP 267 F.SI. P. ... 267 inital flow 24 final flow 24. per geo. Eaton - telephone 3:40 pm

415

T STEELED

1	SIMPRY NOTICES A	ND REPORTS ON WELLS	
1. Name of Operator Pan A	merican Petroleum (Corporation	
2. OIL WELL GAS WELL [OTHER KX	(Specify) Exploratory	
	al "V" No. 1	,-,,	
	nd 900' FEL		
Sec. 16 Two	38-N Rge	29-B County	Apache , Arizona.
4. Federal, State or Indian Lease Numbe	r, or lessor's name if fee lease	-	_
5. Field or Pool Name Explor	atory		
6. Check Appropriate Box to Indicate Na	ature of Notice, Report, or Oth	er Data	
NOTICE OF INTE	NTION TO:	SUBSEQUEN	T REPORT OF:
	L OR ALTER CASING	J	MONTHLY PROGRESS
	ECTIONAL DRILL	FRACTURE TREATMENT	REPAIRING WELL
 i	FORATE CASING	SHOOTING OR ACIDIZING	ALTERING CASING
REPAIR WELL CHA	ANGE PLANS		ABANDONMENT
(OTHER)		(OTHER) Progress Repo	rt XX
			ple completion on Well Completion Report and Log form.)
	set at 603 and ce	Bros. rig June 12, 1967 mented with 500 sacks C irculated.	
			STATE O & 1967 CONS. COMM.
8. I hereby certify that the foregoing is	ten Dr.	Title Area Enginear	Date June 23, 1967
G. W. Rato	in, Je.	OIL & GAS CONS	OF ARIZONA RVATION COMMISSION s and Reports On Wells

Form No. 25

File Two Copies

12

Permit No. 415

Form approved. Budget Bureau No. 42-R1425. SUBMIT IN TRIPIS (Other instructions on reverse side) UNITED STATES DEPARTMENT OF THE INTERIOR 5. LEASE DESIGNATION AND SERVAL NO. 14-29-0603-5429 GEOLOGICAL SURVEY 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK Bave jo 😅 7. UNIT AGREEMENT NAME 1a. TYPE OF WORK PLUG BACK DEEPEN b. TIPE OF WELL 6. FARM OR LEASE NAME SINGLE SONE MULTIPLE Wildcat Meraja Tribal "Y" MELF 078 MELL OTHER 2. NAME OF OPERATOR PAN AMERICAN PETROLEUM CORPORATION 9. WELL NO. 3. ADDRESS OF OPERATOR 10. WHELD AND POOL, OR WILDCAY P. O. Box 480, Farmington, How Hexico 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1946 Fal. and 900 Fal. 11. BEC., T., R., M., OR BLK. \$2/4 Section 16, At proposed prod. zone 2-38-2, L-33-2 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE. 12. COUNTY OR PARISH 13. STATE Arisona 30 miles merthwest of Shiprock, New Mexico 16. NO. OF ACRES IN LEASE 10. DISTANCE FROM PROPOSED®
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

18. DISTANCE FROM TROPOSED LOCATION®
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. WELLS 2560 20. ROTARY OR CABLE TOOLS 19. PROPOSED DEPTH letery. 22. APPROX. DATE WORK WILL STARTS 21. ELEVATIONS (Show whether DF, RT, GR, etc.) Hey 31, 1967 Report Later PROPOSED CASING AND CEMENTING PROGRAM 23. QUANTITY OF CEMENT WEIGHT PER FOOT SETTING DEPTH BIZE OF CASING SIZE OF HOLE 42.75 16" 20" 900 40.500 15" 10-3/4" 4500 23 6 209 8-3/4" COPIES OF LOCATION PLAT ATTACHED. RECEIVED MAY 2 9 1967 IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone shot proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Calve blowout preventer program, if any SEGEOLOGICAL SURVEY SIGNED _______ (This space for Federal or State office use) APPROVAL DATE Ç no stora CONDITIONS OF VED BANKS ON CONDITIONS OF VED BANKS OF VED JUN 2 1967

*See Instructions On Reverse Side

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APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK APPLICATION TO DRILL 🕱 PLUG BACK [] DEEPEN 🗍 DATE NAME OF COMPANY OR OPERATOR May 26, 1967 PAN AMERICAN PETROLEUM CORPORATION State Address New Mexico 87401 Farmington P. O. Box 480, DESCRIPTION OF WELL AND LEASE Elevation (ground) Well number Name of lease Report Later Navajo Tribal "V" 14-20-0603-8929 Section-township-range or block & survey (give footage from section lines) Well location Section 16, T-38-N, R-29-12 1940' FSL and 900' FEL Field & reservoir (If wildcat, so state) Wildcat Distance; in miles, and direction from nearest town or post office 50 miles northwest of Shiprock, New Mexico Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: Nearest distance from proposed location to property or lease line: No other wells on lease 3350 feet Approx. date work will start Rotary or cable tools Proposed depth: May 31, 1967 Rotary 4500' Number of wells on lease, including this well, completed in or drilling to this reservoir: Number of acres in lease: None 2560 Address If lease, purchased with one or more wells drilled, from whom purchased: Name Not Applicable Status of bond Statewide Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) \$25.00 Permit Fee paid to Arizona Oil & Gas Conservation Commission on May 26, 1967 on Draft No. 24635, 5222 * Fill in Proposed Casing Program on other side Pan American Petroleum Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Age Valor

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Disection |

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Permit Number:

Approval Date: 2967
Approved By: Jenn Bannister

Notice: Before sanding in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

See Instruction on Reverse Side of Form

CONSERVATION COMMISSION
Application to Drill, Deepen or Plug-Back

Form No. P-1

File two copies

STATE OF ARIZONA OIL

L. O. Speer, Jr.

RECEIVED

RECEIVED

RECEIVED

STATE O & G

CONS. COMM

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INSTRUCTIONS

READ CAREFULLY AND COMPLY FULLY

For the purpose of this determination attach hereto a neat, accurate plat, map or sketch of this lease, section, block or lot locating thereon the proposed site for this location. Plat shall be drawn to a scale which will permit the facile observation of all pertinent data. Show distances of the proposed well from the two nearest lease and section lines, and from the nearest wells on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well, and the names and addresses of all adjoining lease or property owners.

In event plat is filed for the purpose of designating the drilling and producing unit, or proration unit, on which the proposed well is to be drilled, the boundaries of such unit shall be shown, also the boundaries of all other such units attributed to other wells on the same lease completed in or drilling to the same reservoir. The acreage contained within each unit shall also be shown.

Do not confuse survey lines with lease lines. The sketch or plat should show your entire lease if possible. If it is not practical to show the entire lease and the plat shows only a section, block or lot out of your lease, you should clearly show that same is only a part of the lease.

Designate scale to which plat or sketch is drawn. Also designate northerly direction on the sketch or plat. $\omega = 0.022$

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Тор	Bottom	Cementing Depths	Sacks Cement
16"	42 .7 5#	Armco SW	Surface	401	Circulate	40
10-3/4"	40.50#	J-55	Surface	9001	Circulate	500
7" 2	3 & 20 <i>i</i>	J-55	Surface	4500'	4500-2000¹	500

onthe lumber of both

Form No. P-1

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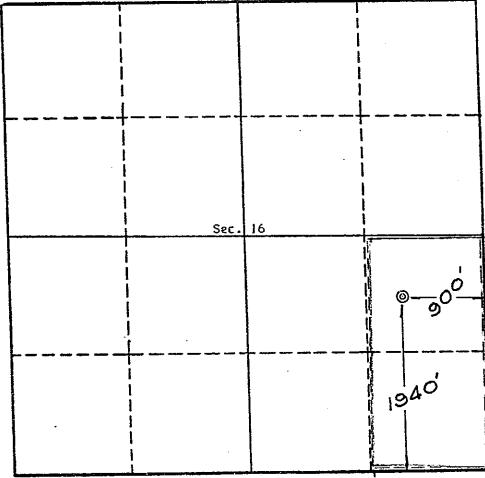
Company PAN AMERICAN PETROLEUM CORPORATION

Well Name & No. Navajo Tribal "V" No. 1

Location 1940 feet from the South Line and 900 feet from the East Line.

Sec. 16 , T. 38 N., R. 29 E., G. & S. R. M., County Apache , Arizona

Ground Elevation Report Later



Scale, 1 inch = 1,000 feet

Surveyed <u>May 25</u> , 19<u>67</u>

This is to certify that the above plat was prepared from field notes of actual surveys made aby me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

EBHEST V. ECHOHAWK

Ernest V. Echohawk

Registered Land Surveyor Arizona Registration No. 2311

415

O



PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION, STATE OF ARIZONA,

-		PAN AMERICA	N PETROLEUM CORPO	RATION	
To:			(OPERATOR)		-
		to drill a w	vell to be known as		
		Pan America	n Petroleum #1 Na	vajo V	
		(*	WELL NAME)		
located	1940' YS	L and 900 FEL	(NE SE)		
Section16	Towns	hip 38N Range	29B , Apr	che	County, Arizona.
The E	/s SE/4				of said
	wnship and R	ange is dedicated to	this well.		
	pliance with a		outlined in the attached tatutes, rules and regular	tions of the	State of Arizona.
Issuea	i iriis	uay oi			
			OIL AND GAS CO	/ 1	
N **		and sates t	By John	Ban	nister
PRIOR TO BEI	NG ALLOWED TO	PRODUCE THIS WELL OFFICE WITH RULE OFFICE WITH RESPECT		EXECUTIVE SECT	RETARY
	A 15.10 G (5.4 001 10 Ba Pri	····	·		
10 the trop		•		State of	Arizona
PERMIT	Nº	415	01.5		Arizona Vation Commission

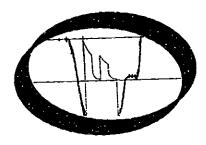
Oil & Gas Conservation Commission

Permit to Drill

FORM NO. 27

API 02-001-20039

RECEIPT NO. 9507



Permit 415



HALLIBURTON COMPANY
DUNCAN, OKLAHOMA



)	COMPANIE TO THE PROPERTY OF TH
· -	
	443326-283

Each Horizontal Line Equal to 1000 p.s.i.

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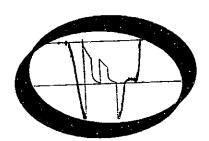
Each Horizontal Line Equal to 1000 p.s.i.

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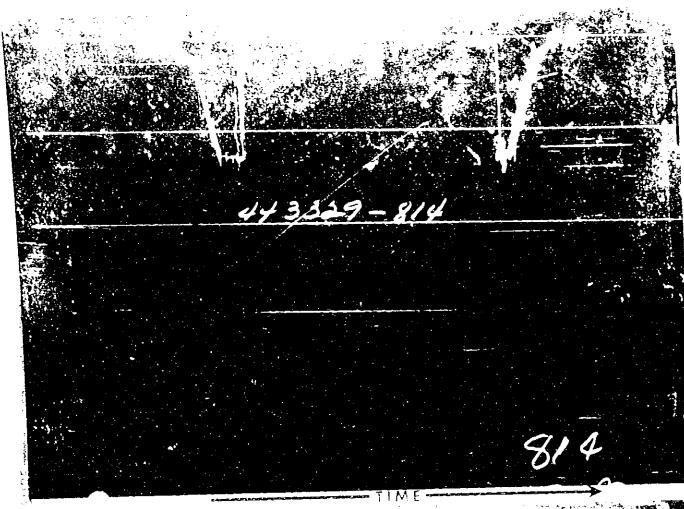
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Q,	= Theoretical Production w/Damage Removed	. bbls/day
Q,	, = Measured Gas Production Rate	. MCF/D
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* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.







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T I G H T HOLE Ticket Number 6-23-67 443329 Closed In Press. Time Halliburton District OPEN HOLE Pressure Roadings Field Depth Top Gauge 2730 Pt BT. P.R.D. No. Hour 12 Clock Elevetion Initial Hydro Mud Pressure Total Depth Bottom Packer 1261 1284 28431 Initial Closed in Pres. intervel Tested Formation Tested 2704' - 2843' Initial Flow Pres. 21 Casing Top.
Perfs. Bot. Casing or Hole Size 19 8 3/4" 28 Finel Flow Pres. 21 Surface Choke Bottom Choke 42 19 Final Closed in Pres. Size & Kind Drill Pipe 4" FH 5" H-90 DC Drill Collars Above Tester Finel Hydro Mud Prossers Mud Weight 1233 1278 Depth Con. Gauge *F Est. Anchor Sixe ID 2½*1

*F Actual & Length OD 5 3/4; X Initial Hydro Med Pres. Pres. Valve initial Closed in Pres. Recovered 15 initial Flow Pres. Final Flow Pres. Recovered Feat of Final Closed in Pres. Recovered Feet of Final Hydro Mud Pres. Oil A.P.I. Gravity-Depth Bot. Ga 2841 **n.** BT. P.R.D. No. Hour Tool Opened Initial Hydro Med Pres. 1365 Remarks Tool opened with very weak blow stopping in Initial Closed in Pres. 115 3 minutes of 5 minute initial flow. Took a 60 minlaitiel 86 87 101 Flow Pres. 94 ute initial closed in pressure. Reopened tool for Fine! Flow Pres. 94 87 88 a 180 minute final flow with weak blow stopping in Fine! Closed in Pres. 143 1 ½ minutes. Closed tool for a 60 minute final Finel Hydro Mud Pres.

closed in pressure. FORMATION TEST DATA

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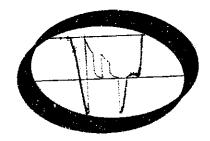
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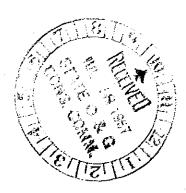
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Q _g = Measured Gas Production Rate	bbls
R = Corrected Recovery	Feet
r = Radius of Well Bore	Minutes
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Z = Compressibility Factor	СР
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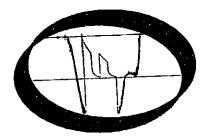
Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

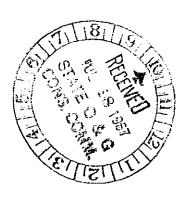






HALLBURTON COMPANY
DUNCAN, OKLAHOMA





HALLIBURTON COMPANY
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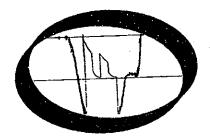
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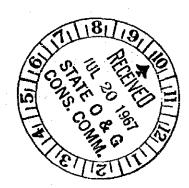
^{*} Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.



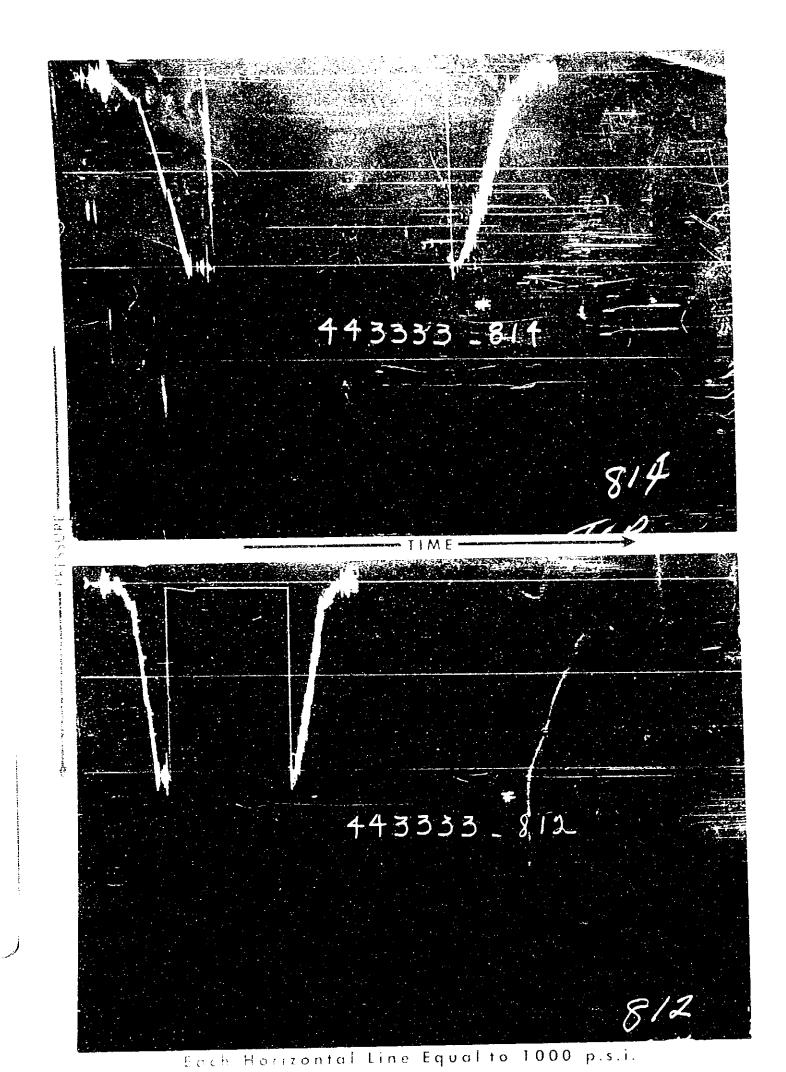
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Lo	= Common Log	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

Each Horizontal Line Equal to 1000 p.s.i.

Petroleum # -29E Apache

FORM 470 2-57

PAN AMERICAN PETROLEUM CORPORATION

501 Airport Drive, Farmington, New Mexico July 17, 1967

File:

E-150-400.1

Subject: Navajo Tribal "Y" No. 1 Apache County, Arizona Wildcat

Permit No. 415

Arizona Oil & Gas Conservation Commission Room 202, 1624 West Adams Phoenix, Arizona

Gentlemen:

With reference to our letter of July 5, 1967, File: E-136-400.1, please attach this complete Navajo Tribal "V" Well No. 1 Drill Stem Test No. 1 to the folder for the original tight hole Drill Stem Test No. 1. Also, you will find the complete Drill Stem Tests Nos. 2 and 3 attached. Test No. 4 will be sent to you when it is received. Real

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

L. O. Speer, Jr. Area Superintendent

Attach.



PAN AMERICAN PETROLEUM CORPORATION

501 Airport Drive, Farmington, New Mexico July 5, 1967

File:

E-136-400.1

Subject: Navajo Tribal "V" No. 1

Apache County, Arizona Wildcat

Permit No. 415

Mr. John Bannister **Executive Secretary** Arizona Oil and Gas Conservation Commission Room 202, 1624 West Adams Phoenix, Arizona 85007

Dear Sir:

This has reference to your letter of July 3, 1967, pointing our that the drill stem test report on the subject well did not include all of the pertinent information regarding the drill stem test. At the time distribution of this report was made, we were not aware the service company had not completed all of the data on the form but simply made distribution of the report as it was received. We are obtaining additional data sheets from the service company which will be completed with all of the data included and a copy will be furnished you so that it may be inserted in the folder.

Also, you will note from the attached copy of the U. S. Geological Survey Form 9-331, showing the progress of the well during the month of June, that full information on both DST Nos. 1 and 2 was made. This report was prepared and mailed in a timely manner but unfortunately, as you will note from the attached envelope, your copy was missent to an obsolete address and which was then returned to us today. We hope that this report will suffice your files for DST data pending our completion of a revised data sheet form which will then be sent to you in the near future. We have received the service company report on DST No. 2 and note that there are some blanks on this form which are also not completed. We will not make distribution of this report until the form is fully completed with all pertinent information.

Pursuant to your rules and regulations, please keep information regarding this well in your confidential file for the six-month period that it may be so retained. Please be assured that it is not our intent to withhold any information from the Commission, and we will make a more determined effort in the future to see to it that information is furnished both promptly and completely.

Yours very truly,

PAN AMERICAN, PETROLEUM CORPORATION

L. O. Speer, Jr. Area Superintendent

Release Date

Attachment

July 3, 1967

Pan American Petroleum Corporation 501 Airport Drive Farmington, New Mexico 87401

Attention: Mr. L.O. Speer, Jr., Area Superintendent

Re: Pan American Petroleum #1 Navajo V NE SE 16-38N-29E, Apache County, Arizona Permit 415

Gentlemen:

Your report of Formation Test Data on captioned well has been received. It is noticed that much of the pertinent information is withheld and instead entered in those spaces is the notation, "Tight Hole."

This Commission of course is entitled to all information developed by an operator in his operations and it is requested that this information be furnished to this Commission.

If an operator declares in writing to the Commission that a well is being drilled tight, the Commission will retain all information, including samples but excepting location site, in a confidential status for six months from date of completion. Our file does not contain such a request from you.

Please be assured it is our desire to cooperate with you in every manner we may.

Very truly yours,

John Bannister Executive Secretary mr O

CONSIGNEE MEMO ARIZORA I OIL BAS CONSER COMM 1624 W ADAMS RM 202 PHOENIX, ARIZ PAR AMER PET FARMINGTOR, NM CONSIGNEE ROUTING POINTS OF TRANSFER, FREIGHT BILL DATES AND NUMBERS DEST. STATION GBL OR SHIPPER NO. WHIT 2 264854 7/12/67 450 PPD CTN ROCK CORE SAMPLE 53

I. C. C. REGULATIONS REQUIRE THAT ALLEREIGHT BILLS BE PAID WITHIN SEVEN DAYS.

June 20, 1967

Pan American Petroleum Corporation P.O. Box 480 Farmington, New Mexico 87401

Attention: Mr. L.O. Speer, Jr., Area Superintendent

Re: Pan American Petroleum #1 Navajo V NE SE 16-38N-29E, Apache County, Arizona Permit 415

Gentlemen:

It is our understanding that captioned well has been spudded and is drilling below 1,200 feet.

As we have indicated to you, this Commission should be kept currently informed as to the operations on any well drilling within the State of Arizona. For your convenience, in reporting wells drilling on the Navajo Reservation, we will accept copies of your reports to US. Geological Survey. There is one exception, that the Well Completion Report be on this Commission's form. We invite your attention to the enclosed information sheet. Copy of this sheet was forwarded with your permit.

You are requested to file with this Commission, at your earliest convenience, the reports to bring this well to its current status. Should you have any questions, or if we may be of assistance to you, please let us know.

Very truly yours,

John Bannister Executive Secretary mr enc